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ABSTRACT

This study examined the role of lesson plan design in helping teacher candidates meet the diverse needs of middle school students. Participants were student teachers who had been taught to use differentiated lesson planning. The study investigated whether they were differentiating in their planning, assessment, and instruction in the student teaching setting. Participants provided copies of three lesson plans from their preservice class (which directly required differentiation) and three lesson plans from the current student teaching setting. They were also observed twice, and they completed a survey on what differentiation was, whether they differentiated as student teachers and felt prepared to differentiate, and what they thought of the required lesson plan format. Results showed continuing problems with the expectations of cooperating teachers relative to those of the university instructional team. There was minimal awareness that student needs and actual assessment data were the driving forces of instruction. When evidence of differentiation was seen, it was primarily in the product area. There was some evidence of it in the process area, but none in the content area. While student teachers thought they employed differentiation in the classroom, they were more typically offering simple task accommodations. However, each had latched onto some specific aspect of differentiation without internalizing the whole picture. (Contains 10 references.) (SM)

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Differentiating in the Classroom: A Study of Student Teachers

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Abstract

This study examines the role of lesson plan design in helping teacher candidates to meet diverse learning needs. The authors studied student teachers who had been taught to use a differentiated lesson plan to see if they were differentiating in their planning, assessment, and instruction. They concluded that, indeed, lesson plan design does facilitate differentiation but that instruction, coaching, and examples are also needed.

Differentiating in the Classroom: A Study of Student Teachers

Louise Conn Fleming and Pamela Hudson Baker

In the Middle Grades classroom, diverse learners are seemingly becoming the norm rather than the exception. Finding ways to meet the varied needs of all learners is a challenge for even the most experienced educator. This study examines the role of lesson plan design in helping teacher candidates to meet diverse learning needs. Specifically we examined differentiation, that is using different targets, instruction, and assessment to address both content standards and learner differences. It should be noted that differentiating is not limited to students whose needs have been officially identified. It also includes any students who have mastered given content or who need further support.

Background Information

Beginning with the graduates of 2002, Ohio's standards changed from certification to licensure, and levels changed to include special licensure for teachers of middle childhood, grades four to nine. These teachers are required, in addition to their teacher preparation, to have two content areas. When our teacher education faculty at Ashland University were preparing to meet the new standards, the faculty were divided into program areas. The middle childhood program team developed their new licensure program to match National Middle School Association's research and recommendations for middle grades teachers. For example, *Turning Points 2000* (Jackson & Davis, 2000) recommends teaming of teachers, differentiation in the classroom, Backward Design, integration of assessment and instruction, and flexible scheduling. In order to be effective in preparing teachers to function within these structures, the program team further decided to model them.

The middle childhood program revolves around two teams who integrate methods, assessment, and field experience. Block I presents middle grades philosophy, and Block II presents content methods, assessment, differentiation, and evaluation. In these blocks we teach and model middle level principles, hoping to help our students to develop attitudes and skills for building an environment of effective learning for all students. One of our goals is to provide some realistic strategies for meeting diverse learning needs in a middle grades classroom. Successful programs for educating diverse learners can often be found to include interactive teaming among stakeholders with expertise in different areas along with a core set of values (Thomas, Correa, & Morsink, 2001; Walther-Thomas, Korinek, McLaughlin, & Williams, 2000; Wormeli, 2001).

Pam and Louise team with a colleague to co-teach what we call "the Junior Block," Middle Grades Methods and Assessment II and Middle Grades Field Experience II. We run the course from 8 a.m. to 3 p.m. two days a week; our students are either in class during those times or in the field for a full day for the entire semester. In class we teach planning, assessment, instruction, differentiation, and evaluation. Assisted by adjuncts, we also coach the students while they complete a field experience at a middle school. The students are expected to carry their methods and assessment into their field settings. One of our goals for the course is to have our students differentiate planning, assessment, and instruction, in order to better address the needs of their learners. We teach them how to differentiate, require it in their lesson plans, and help them implement it.

During this process, we developed a lesson plan to emphasize Wiggins and McTighe's (1998) Backward Design techniques in conjunction with a focus on meeting the instructional needs of differing learners. Tomlinson (1995) defines the differentiated classroom as a place

where "the teacher plans and carries out varied approaches to content (what students learn), process (how they learn), and product (how they demonstrate learning) in anticipation of a response to student differences in readiness, interest, and learning needs" (p. 10). Such a differentiated environment promises to be a key for success as we embark upon education in the twenty-first century, and our goal was to prepare our students to use this key in their teaching. The dilemma we faced, which led to this study, was ascertaining the level to which the students actually exhibited these desired skills after they left our block. We needed evidence to indicate how successful we had been in building the ability and willingness to differentiate and to help us to do a better job in the future. Thus, we studied our former juniors at their next level of field experience, student teaching.

Methods

Because we were evaluating a specific process in teacher education for the purpose of understanding our program better, we used a qualitative design with the purposive selection of participants (Wiersma, 2000). They were selected based upon their completion of our junior methods block. In order to assure the confidentiality of all participants and their cooperating schools, pseudonyms have been used in place of their actual names. Students were told only that we were doing a study to help us to improve the Junior Block. They were asked to allow each of us to observe them once; to provide six lesson plans, three from their junior experience and three from student teaching; and later to meet with us for an interview. Because we did not want to bias the results, we did not tell the students that we were looking for evidence of differentiation.

Description of Informants and Contexts

School A is a grade six to eight middle school and is known for its adherence to middle

school philosophy: teaching teams, support for students, engaging learning activities, and use of alternative assessment. The community is a small city that has grown into a bedroom suburban community of middle to upper middle class people. Both students and faculty were friendly, happy to accommodate our need to visit, and helpful to give directions or answer questions. Elaine and Kyle did their student teaching at this school.

At the time of this study, Elaine, a female, was about 22, a lively young woman with blonde hair and blue eyes. She is a very goal-directed person and had been a delight to have in the Junior Block. She is very energetic and very caring, always willing to listen to another person's viewpoint. She has a good sense of humor and is always upbeat. Her cooperating teachers and students in the Junior Block loved her, as did her classmates.

Kyle was the only male in the study, about 22, with dark hair and brown eyes. He is very conscientious, and in the Junior Block, although he could be jocular, he tended to be fairly serious both in class and on the field. His field experience was mediocre. He modeled his cooperating teacher who has done the same things for so many years that he doesn't work at teaching any more. Kyle had to be prodded to do the necessary work to get background information for his lessons. By the time of observing his student teaching, however, he clearly felt comfortable with students, joked with them, liked them, and prepared his lessons thoroughly. The one thing that he will have to watch is his female students. They like him and some of them tended to be flirtatious.

School B is a rural school. It is a grade five to eight middle school but runs more like an elementary school. There is no following of middle school philosophy. The community tends to be low income, and many students are from farming families. Recently a division has come about in the community as more wealthy people are moving to the country. This influx has caused a rift

between the people whose families have lived here for generations and the newcomers who flaunt their wealth and strive for modernization. The school is subdued in friendliness; the faculty and secretaries did not particularly welcome us, but they did not mind our being there. Lisa and Diana did their student teaching at this school.

Lisa is a female. At the time of this study, she was about 22, with dark hair and blue eyes. She was the only married student in the group. In her Junior Block, Lisa was always very serious about learning, conscientious in all of her lesson preparation, and goal-oriented. Her cooperating teacher and her students loved her. She worked well with her students. She was kind and caring, but she also maintained an appropriate distance from them. She worked extremely hard, putting in long hours, preparing her lessons, bringing in extra information to her students and being imaginative in her presentation. As a student teacher she did the same thing. The administrators, her cooperating teacher, and her students loved her. She was very comfortable as a teacher.

Diana is a female and was about 22, with blonde hair and blue eyes. As a junior Diana never went beyond the requirements. We allowed her to redo assignments that were not right and coached her in her field experience. She was uncomfortable and unprepared in her field experience, but with extensive coaching from her cooperating teacher and her supervisor, she rose to the level of adequate. As a student teacher, she appeared to dislike teaching, and, once again, she prepared only to meet the requirements. That is, she knew the minimum of how to instruct the students, but she did not have any background understanding either of the material or its fit into the curriculum.

School C is a small city surrounded by farms. The city and farming areas generally have a mutual respect and work fairly well together. The community, and thus the school, has a wide

diversity of income and education levels. There are many low-income and even aid-dependent families, many lower to middle class, and some upper middle in the community, and the school reflects the same diversity. The school is a grade seven and eight middle school. The faculty and students are fairly friendly and were willing for us to visit. They did not go out of their way to welcome us, but they did not seem to mind our presence.

Nancy was the only student middle grades student teacher at this school. She has brown eyes and light brown hair and was about 22. In the Junior Block she was a decent student and seemed to like teaching. She was not very confident but she tried to teach meaningfully and to use methods that would engage her students. She did not, however, put a lot of time into lesson preparation and into informing herself with background information. As a student teacher she appeared to be the same. She seemed capable of running a class but her methods were fairly traditional, and she had not gone out of her way to be prepared with more information than she was actually teaching.

Procedures for Data Collection and Analysis

The goal of data collection was to find evidence of the level of differentiation carried from the junior block to the student teaching setting. Therefore, a variety of methods were utilized by the researchers. Each of the five informants was asked to provide copies of three lesson plans from the junior block experience and three lesson plans from the current student teaching setting. A review of these documents would allow a comparison of planning for differentiated instruction in content, process, and product areas. The junior level lesson plan directly required differentiation whereas the departmental student teaching lesson plan did not. In addition to the written materials, each informant was observed twice, once by each researcher. The observations

were scheduled during the last two weeks of the student teaching experience in order to see the participants at the maximum level of experience prior to licensure. Finally, each student was sent a list of four interview questions via e-mail at the conclusion of the student teaching placement. The questions were as follows: (a) What is differentiation, as you understand it?, (b) Did you differentiate as a student teacher?, (c) Did you feel prepared to differentiate?, and (d) What do you think of the junior block lesson plan form? The collection and review of data was done by two researchers, one from the general education perspective and one from the special education perspective. Each researcher examined the data independently prior to comparing findings and jointly identifying themes.

Evidence of Trustworthiness

In any qualitative design, strategies can be used to enhance the value of the information gained (Johnson, 1999). Even though this study was conducted for the highly specific purpose of improving our own teacher preparation program, we were cautious to consider trustworthiness in hopes that this information would be useful to other educators. Krefting (1999), suggested four key techniques that can be used to establish a sense of trustworthiness in qualitative research. They include: (a) credibility, (b) transferability, (c) dependability, and (d) confirmability. Within each of these strategy areas, a variety of criteria may be utilized to support what has traditionally been viewed as the validity and reliability of the study. Credibility requires a sufficient level of time be spent with the informants for any patterns to emerge. The informants used in this study were known to the researchers in a variety of contexts (i.e. classes, junior field, student teaching) over a one year period of time. The informants were accustomed to observation from university personnel and had previously participated in discussion of their experiences with both researchers.

Credibility, dependability, and confirmability can each be enhanced by the use of triangulation. The documents gathered from the informants provided triangulated data sources for both the junior level lesson plan and the student teaching lesson plan. Methods triangulation was also employed by adding observation and interview components to the document review. Member checking was not utilized until the interview phase of the data collection because informants were unaware to that time that differentiation was a major aspect of the study. Peer review was utilized by sharing these findings with a colleague who has utilized this lesson format to obtain his reactions to the interpretations and recommendations made. The researchers also used reflection as a vehicle to support greater credibility and confirmability. Each of us is aware of the professional and personal bias that we bring to any situation. We have discussed and documented the role of our backgrounds on the perceptions that we bring to the study. It is because of our differences that greater balance in the results can be inferred. Finally, regarding transferability, we have attempted to provide enough information about our program, the contexts, and the informants for readers to ascertain the applicability of our findings to their specific situation.

Results

The information collected came from a combination of document reviews, observations, and follow-up interviews with each participant. A summary of each segment of the data can be found in the following sections.

Document Review

Opportunities to plan for differentiation appear on the lesson plan for the Junior Block and our Junior Block team emphasizes the importance of planning to differentiate learning experiences for those at various learning levels: core, enriched, and fundamental. Even though the lesson

plans reviewed from the Junior Block actually included minimal evidence of differentiation, certain aspects of this philosophical framework did emerge. For instance, instruction often included differentiation for students at fundamental levels of readiness. All of the field experience sites included an intervention specialist on the teaching teams, and it was common to have her in the classroom during instruction. When she was not, the teachers worked with the students who were experiencing difficulty to make sure they were on track with the lesson. The students who had already achieved lesson goals were not treated differently in any of the Junior Block classrooms, and it was rare for our students to plan for or to treat them differently in their lessons. In the lesson plans it was common for all of the sections to be filled in as if the students were differentiating, but it was clear that all students would be doing the same things.

The department lesson plans do not include any planning for differentiation. This is the format that the student teachers used, and none of them showed that they had planned for differentiation. Although there is a section for accommodations, most of them only regarded these as necessary for students with physical disabilities.

Elaine's junior lesson plans were filled with activities. For one she used a game of Jeopardy!; for another she taught fractions using candy; for another she taught the concept of negative numbers by using pictures of a mountain and an ocean; to begin one lesson she used a K-W-L activity. All of them showed attempts to engage students' learning but no differentiation. For student teaching she still used activities to engage her students, but her lesson plans still showed no differentiation. She taught math and language arts. Her math lesson plans included a game of Jeopardy!, a pretest, a study guide, manipulative blocks, and student study teams. Her language arts lessons included writing stories to a prompt, writing descriptive paragraphs, using a

semantic map, and having students conduct research on computers. She explained that she relied on the intervention specialist to differentiate for the students on IEPs.

Kyle's Junior Block lesson plans included no differentiation. His cooperating teacher also did not differentiate and expected Kyle to follow his model of instruction, which was based on overheads and lecture. By contrast, Kyle's student teaching lesson plans were filled with engaging activities. He taught social studies and language arts. In social studies he donned an apron and "cooked" the Constitution, with students adding the ingredients. In language arts he used a Venn diagram to discuss characters, poetry stations, student power point presentations, and student-written "newspapers." He did not have his lesson plans differentiated, but he explained that he did work extra with students who had learning difficulties. His rubrics for assessment were also well developed and clear.

Lisa's junior lesson plans had no differentiation; nor did her student teaching lesson plans. She explained that all the students with IEPs were in one class and that she worked with the intervention specialist. Obviously these students are the ones with disabilities, and from the lesson plans, it may look as if the students who needed more of a challenge were getting no special treatment. Upon a closer reading of both her junior and student teaching lesson plans, one finds that all of her lessons contain many levels and multiple intelligences. In her junior field experience she taught language arts and used role-playing, multi-level questioning, predictions, writing, pictures, films, quotes, and students' experiences. In her student teaching, while she read *The Diary of Anne Frank* to her students, she had them write journal entries, showed the movie, gave them a study guide, had students do outside projects for extra credit, discuss prejudice and segregation, design a poster, draw a hiding place, write character analyses from the viewpoints of

other characters, and write a letter to Mr. Frank. Therefore, with no apparent planning for enrichment, she challenged students at various levels. Her rubrics for assessment were also clear.

Diana's junior lesson plans included differentiation. She taught language arts, and her supervisor worked with her to think of ways to challenge students at different levels. Her cooperating teacher mostly relied on the intervention specialist to work with the students who had learning difficulties but never thought to challenge the ones who had already mastered the learning outcome. Diana read a book to her students and gave them a comprehension worksheet, but with some coaching by her supervisor she also had students doing research related to topics in the book. In her lessons she tried to engage her students by giving them imaginative writing activities, and one day she used a map activity related to the book. She taught math during her student teaching and had them dancing and doing tesselations. She had no differentiation or accommodations in her lesson plans, although she did accommodate for a hearing impaired student during the dance.

Nancy's junior lesson plans for math included having students use manipulatives and working independently on sample problems. In language arts she was reading a story to her students and asking them questions over comprehension and characters. Although the sections were filled out for differentiation, clearly she intended all students to be doing the same things. For student teaching she taught math. She used the department lesson plan and did not differentiate. Her lessons were fairly traditional, homework review, activity, and homework assignment. She did, however, incorporate manipulatives and cooperative groups when possible; one of her activities included taking her students outside to videotape.

Observations

We each observed each student once during their student teaching. The observations were completed near the end of the student teaching experience, so the students had already received consistent support from their cooperating teachers and university supervisors. Not surprisingly, we found that the students who had detailed lesson plans also had the best presentation in class. None of the student teachers showed evidence of differentiation or accommodations on their lesson plans, but some of them actually did both differentiate and accommodate.

Elaine was clearly in charge of her class. Both observers watched a sixth grade math class. Elaine knew the names of all of her students, and she stopped class to make sure all of her students were paying attention. Elaine used techniques that allowed for movement (e.g. drum roll for impending answers; thumbs up, stand up, thumbs down for oral review of >, =, < concepts). She used a variety engaging activities and a lot of questioning. Students were very willing participants in the class with lots of volunteers for showing their work at the overhead. Elaine clearly stated directions and reinforced students frequently. She asked easier questions of her students who were not yet grasping higher-level content and provided students with verbal positives for their correct answers. Although no obvious attempt was made to challenge the students who were mastering the skill quickly, they appeared to be challenged by the concepts. Elaine was hired before the end of her student teaching. Her cooperating teacher and principal were very impressed by her capability.

Kyle's teaching was inspired, and his students appeared to be enjoying his class. He used imaginative activities and group work. He provided samples to help students with ideas, and he

coached them while they worked. Although he relied on the intervention specialist for his students with learning difficulties, he provided choices within his assignments, allowing all of the students to match their interests with the material. When Pam observed, Kyle held class in the school's media center so that each student could work at a computer. The project afforded students with choices of topic and style of the presentation slides they were creating. Kyle set parameters by providing students with titles and sequence for the slides, but allowed them to choose the format and specific information to include. The students were consistently engaged throughout class (except for a couple of overly active male students) and freely asked for assistance from this student teacher. Kyle, also, was hired before he finished his student teaching.

Lisa is an exceptional teacher. We each observed Lisa teaching an 8th grade English class. Although her lesson plans did not include differentiation, she clearly asked a variety of levels of questions in order to challenge students who were able to deal with complex issues while also including all of the others. It was clear that she took her students very seriously by listening carefully and responding to their comments. We were both impressed by the depth of the students' answers. She provided a variety of activities during class and kept the pace at a productive level. She used internet and other sources extensively, in order to help students to connect with the material, and she was very aware of engaging as many of the multiple intelligences as possible. She provided study guides, videos, pictures, outside projects, predictions, and questions to help students empathize with the characters. The outside projects allowed students to choose topics of interest to research and present to the class using a format they thought appropriate. We observed one project presentation that was an oral book report and one that was a poster presentation of a research paper on a specific battle from the era

represented in the novel. The school offered Lisa a job, but she was not able to accept it.

We each observed Diana with a 6th grade math class on consecutive days. Diana thought she was helping students to engage with the material. She used a dance and tesselations, but when Louise observed her, she spent the entire class threatening her students. All of her instructions were given orally, and she seemed irritated by her students. She praised students who had done a good job on their tesselations but seemed unwilling to answer other students' questions. She told Louise that she could hardly wait for her student teaching to be over so she could leave and go back home. When Pam observed her the next day, Diana tried to cancel the visit because she wasn't feeling well. She continued the tesselations activity, but seemed negative and totally disinterested in the students. While these tesselations may give the illusion of differentiation because each student creates their own drawing using patterns of shapes, there was no clear purpose to the activity. We could not ascertain the objective and Diana never told the students why they were doing these activities. It seemed like students were engaged early, but their off-task behaviors increased consistently throughout the class period.

Nancy had all of her students doing the same work, although she provided the accommodation of extra time on the quiz for students who needed it. Louise observed students finishing a quiz and working on a worksheet. They worked individually at their desks while Nancy circulated, answering questions. She allowed her students to correct any questions that they missed for half credit. It appeared that neither the students with learning difficulties nor the students who had mastered the material were being served. Her students appeared to like her a lot although her instruction and activities were uninspired. When Pam observed another section of seventh grade math, the outcome was similar. The lesson was heavy on lecture during which there

were three inaccuracies and several missed opportunities to vary explanations and techniques for differing learner styles (e.g. auditory directions, short wait time). After the instructional phase, students worked independently while Nancy sat at her desk grading papers. The students came to her to ask questions about the work.

Interviews

The first question the participants were asked to address was "What is differentiation, as you understand it?" Their responses reflected that they had each learned some portion of what it means to differentiate instruction. For instance, one participant noted the need to "take the time to understand the differences of your students." However, this student did not address how to use this information to adjust instruction. Some participants noted only the enrichment end of the spectrum of learners while others noted only accommodating for the special education perspective. When the participants comments did move in the direction of specific instructional techniques, no one remembered to utilize all three areas for differentiation (i.e. content, process, product). No one noted the importance of student choices and input in the learning process. All of the students did mention the importance of differentiating if teachers are to maximize student success; they just didn't consistently reflect the extent of how to make that happen.

The second question asked "Did you differentiate as a student teacher? Why or why not?" All five of the participants claimed to be using differentiation techniques. Philosophically, each participant noted the importance of trying to differentiate. However, the examples they used to illustrate their attempts to differentiate were often specific accommodations for special education students such as extended time or shortened assignments. Two participants noted the use of different levels of questions for lower to higher functioning learners, with one also noting

differences in grading expectations for different students. One participant noted observing a cooperating teacher building choice into projects the students were doing as an example of differentiation. One student commented on consciously trying to infuse multiple intelligences experiences into lessons due to memories of her own experiences: "I remember when I was in grade school and how boring the lessons (and the teacher) would be if they didn't shake it up a bit." All of the students reported that differentiating was difficult to do on a daily basis.

The third question asked "Did you feel prepared to differentiate?" Each of the participants reflected the importance of practice in feeling truly prepared to differentiate. Four of the five reported feeling ready, but one felt that she didn't have enough of a chance to practice in her previous field experiences. One noted that differentiation has become more comfortable with more practice noting that "time spent in class helped me learn how to differentiate; but until one actually uses it in an actual environment, one cannot truly know how to do it fully." One participant reflected that some subject areas were easier to differentiate than others. One participant felt more prepared to adapt lessons for learners who were functioning at lower levels than those at higher levels, again illustrating the accommodation mindset rather than the differentiation mindset.

The final question asked of the participants was "What do you think of the junior block lesson plan form?" The participants were split in their response to this question. Two participants noted really liking the junior plan because it was "well-organized" and "useful in shaping our thinking." One participant waffled noting that the plan was very time intensive and "too complex" to be practical, yet she also noted that what she learned from that experience "always sat in the back of my mind while teaching." Two participants reported disliking the junior lesson plan

because of its length and a sense of repetition in some sections. One of these noted, however, that having a section for differentiation on the lesson plan used in student teaching would have been beneficial.

Discussion

Given the data, we found that several issues emerged.. These issues can be grouped into three categories: situations inherent in the student teaching experience or setting, instructional practices of the student teacher, and aspects of the teacher preparation experience that could be modified to enhance program outcomes.

Situational Issues

One aspect of the student teaching experience that continues to be problematic is the expectations of the cooperating teachers relative to the expectations of the university instructional team. The influence of modeling can, at times, be paradoxical to research-based, excellent practice. For instance, some student teachers are told that lesson plans are something you won't have to write anymore once you get your own class. They then learn to minimize the importance of planning lessons that meet a clear purpose, but rather have nothing more than a series of groundless activities. Additionally, it is always difficult to find classroom settings where every student's needs are being met to the maximum extent possible. What seems to be occurring is that we infuse a foundational philosophical perspective in the students that is then minimized in the field when they see so little implementation of differentiation, especially for students who master concepts quickly and need higher levels of challenge. Finally, our encounter with a student who showed no heart for the experience was discouraging. While we don't expect all of the student

teachers to be excellent, we do expect them to have a positive attitude about teaching and learning.

Practice-based Issues

We observed minimal evidence that awareness of student needs and actual assessment data were the driving force of instruction. The gifted end of the spectrum was frequently ignored and the special education students were still doing the same work done by all the other students with some minimal accommodations. Series of activities with no clear sense of purpose surfaced in some situations with a heavy reliance on whole class instruction. The use of group work was rarely seen and consisted of small groups all doing the same tasks. When evidence of differentiation could be found, it was primarily in the product area; some evidence could be found in the process area, but no content differentiation was observed. Most of the actual differentiation seemed to be incidental as it was not reflected in any of the current lesson plans. At least three of the five students did demonstrate evidence of quality efforts to meet the needs of differing learners.

Preparation Issues

During their junior methods block, the students were each exposed to Tomlinson's (1995) definition that reflects the need to vary content, product, and process as they related to each student's level of interest, learning needs, and readiness level. Walker (2001) found that while many teachers in the middle grades setting think they employ differentiation, they are more typically offering only simple task accommodations. Walker also noted that many teachers overlook the importance of involving the student in learning decisions. Our students' responses mirrored these perspectives, but also showed that they each had latched onto some specific aspect

of the differentiation concept without internalizing the whole picture. Clearly we need to infuse additional opportunities for students to experience differentiation in our methods setting. The lesson plan sample these students used as juniors (see Appendix A) needs to be revised to address the issues raised in this study such as length, repetition, and practicality. Additionally, the department lesson plan used for student teaching needs to include a section for differentiation. At least having the categories will encourage our students to think about differentiating. Finally, a continued emphasis on reflective teaching is necessary as an individual's need for lesson preparation varies based upon self-awareness of strengths and weaknesses. It was of great concern to us that a lack of actual content knowledge in some areas impacted instruction. Trying to achieve a differentiated learning environment when the student teacher is struggling with the accuracy of content is not a realistic venture.

Recommendations

As a result of the information we gathered from this study, we think we are headed in the right direction by requiring differentiation in the Junior Block. We were pleased to see that three of the five students were varying their instruction and assessment to encompass multiple intelligences. These three were also making an attempt to teach material on multiple levels, challenging the students at higher levels while supporting students at lower levels. However, we will also need to revise several aspects of our junior methods block. First and foremost, we have modified the lesson plan design in an attempt to streamline the format for easier use. We will be piloting the new lesson design in the fall semester of 2002. Continued revision of the lesson plan form will be made until students report greater success and a stronger willingness to use it. Then we will propose that the department adopt the same format so that consistency can be attained. It

may even be helpful to develop a streamlined lesson plan design to be introduced once students have shown mastery of the more detailed format. Providing a computerized version of both may also serve to enhance the usefulness of the form. Instructionally, we will provide students with examples of completed lesson plans designed to better illustrate how they can use the plan to support differentiation. Additionally, we believe that we need to spend more time teaching and coaching differentiation, including learning needs, multiple intelligences, learning styles, and student choice. In future research, we will add an element of comparison between observations from the junior methods experience in addition to the lesson plan to enhance the comparison of data from both experiences.

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Appendix A: Original Lesson Plan

Fig. 2: LESSON PLAN FORM

Name_____**Class**_____**Date**_____**Topic**_____

I. Essential Question(s)

1.

2.

II. Unit Question(s)

1.

2.

III. Differentiated Targets (Knowledge, Skills, Understanding)

Fundamental: The student will. . .

1.

2.

3.

Core: The student will. . .

1.

2.

3.

Enriched: The student will. . .

1.

2.

3.

IV. Differentiated Assessment (How students will demonstrate learning)

Explain assessments, and attach assessments/rubrics you will use.

Fundamental:

Core:

Enriched:

V. Differentiated Instruction (What and How You Will Teach: How you will assure that the students will achieve the targets. Activities you will have students do)

A. Introduction (What you will **say** to get students' attention: **WHERE**)

B. What teacher will do

Fundamental:

Core:

Enriched:

C. What students will do
Fundamental:

Core:

Enriched:

VI. Infusion of Multiple Intelligences (Linguistic, Logical-Mathematical, Spatial, Bodily-Kinesthetic, Musical, Interpersonal, Intrapersonal, Naturalist)
Name and explain which multiple intelligences you will use in the lesson.

VII. Learning Climate
Explain how you will establish a learning climate for best achievement.

VIII. Grouping
Explain how you will group students for best achievement.

IX. Other Accommodations
Explain how you will accommodate for other student needs.

X. Connections
Explain how this lesson connects with the essential and unit questions and previous and future lessons.

Attach a reflection of your teaching and additional sheets as needed.

Fleming, Baker, Rushton 01

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